Title (en)

A DROWSINESS DETECTION SYSTEM

Title (de)

SYSTEM ZUR ERKENNUNG VON SCHLÄFRIGKEIT

Title (fr)

SYSTÈME DE DÉTECTION DE SOMNOLENCE

Publication

EP 3871204 A4 20221102 (EN)

Application

EP 19876748 A 20191022

Priority

- US 201862748596 P 20181022
- IB 2019058990 W 20191022

Abstract (en)

[origin: WO2020084469A1] A machine-implemented method for automated detection of drowsiness, which includes receiving from an imaging device directed at the face of an operator a series of images of the face of the operator onto processing hardware, on the processor detecting facial landmarks of the operator from the series of images to determine the level of talking by the operator, the level of yawning of the operator, the PERCLOS of the operator, on the processor detecting the facial pose of the operator from the series of images to determine the level of gaze fixation by the operator, on the processor calculating the level of drowsiness of the operator by ensembling the level of talking by the operator, the level of yawning of the operator, the PERCLOS of the operator and the level of gaze fixation by the operator, and generating an alarm when the calculated level of drowsiness of the operator exceeds a predefined value.

IPC 8 full level

A61B 5/00 (2006.01); **A61B 5/11** (2006.01); **A61B 5/16** (2006.01); **A61B 5/18** (2006.01); **B60K 28/06** (2006.01); **G08B 21/06** (2006.01); **G08B 29/18** (2006.01)

CPC (source: EP US)

A61B 5/1103 (2013.01 - US); **A61B 5/1114** (2013.01 - US); **A61B 5/1123** (2013.01 - US); **A61B 5/1128** (2013.01 - EP US); **A61B 5/163** (2017.07 - EP US); **A61B 5/165** (2013.01 - US); **A61B 5/18** (2013.01 - EP US); **A61B 5/6893** (2013.01 - EP US); **A61B 5/7267** (2013.01 - EP US); **B60Q 9/00** (2013.01 - US); **G06T 7/20** (2013.01 - US); **G06T 7/70** (2016.12 - US); **G06V 20/597** (2022.01 - US); **G06V 40/161** (2022.01 - US); **G06V 40/171** (2022.01 - US); **G06V 40/20** (2022.01 - US); **G08B 21/06** (2013.01 - EP US); **G08B 29/186** (2013.01 - EP); **G08B 29/188** (2013.01 - EP); A61B 2560/0247 (2013.01 - US); G06T 2207/30201 (2013.01 - US); G06T 2207/30268 (2013.01 - US)

Citation (search report)

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- See references of WO 2020084469A1

Designated contracting state (EPC)

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DOCDB simple family (application)

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